

CLAIMS

What is claimed is:

1. An integrated circuit comprising:

5 at least one metal layer comprising a plurality of sections, each section comprising a plurality of conductors to interconnect points on the integrated circuit, wherein a preferred direction, within a section, defines a direction, relative to the boundaries of the integrated circuit, for at least fifty percent of conductors in the section;

10 a first section comprising a first preferred direction for the conductors deposited in the first section; and

a second section comprising a preferred diagonal wiring direction for the conductors deposited in the second section, such that the diagonal wiring preferred direction is a direction different from the first preferred direction.

15 2. The integrated circuit as set forth in claim 1, wherein the first preferred direction comprises a diagonal direction.

20 3. The integrated circuit as set forth in claim 2, wherein the first preferred diagonal direction comprises a direction perpendicular to said a preferred diagonal wiring direction in said second section.

4. The integrated circuit as set forth in claim 1, wherein the diagonal direction comprises an octalinear direction.

5. The integrated circuit as set forth in claim 1, wherein the diagonal direction comprises a hexalinear direction.

6. The integrated circuit as set forth in claim 1, wherein:  
the first preferred direction comprises a first diagonal direction; and  
the second preferred direction comprises a second diagonal direction, different from the first diagonal direction.

6. The integrated circuit as set forth in claim 5, wherein:  
the first diagonal direction comprises an octalinear direction; and  
the second diagonal direction comprises an octalinear direction complementary to the first diagonal direction.

7. The integrated circuit as set forth in claim 5, wherein:  
the first diagonal direction comprises a hexalinear direction; and  
the second diagonal direction comprises a hexalinear direction complementary to the first diagonal direction.

8. The integrated circuit as set forth in claim 5, wherein:

the first diagonal direction comprises an octalinear direction; and  
the second diagonal direction comprises a hexalinear direction.

9. The integrated circuit as set forth in claim 1, wherein the first preferred direction  
5 comprises a first Manhattan direction.

10. The integrated circuit as set forth in claim 1, further comprising at least one more  
additional section having a preferred direction comprising a diagonal direction.

10 11. The integrated circuit as set forth in claim 1, further comprising at least one more  
section having a preferred direction comprising a Manhattan direction.

12. The integrated circuit as set forth in claim 1, further comprising at least one  
additional wire deposited in a section with a direction different than the preferred direction of the  
15 section.

13. The integrated circuit as set forth in claim 12, wherein:  
the preferred direction comprises a diagonal direction; and  
the direction different than the preferred direction comprises a Manhattan direction.

20 14. The integrated circuit as set forth in claim 12, wherein:  
the preferred direction comprises a Manhattan direction; and

the direction different than the preferred direction comprises a diagonal direction.

15. The integrated circuit as set forth in claim 12, wherein the direction different than the preferred direction comprises a direction complementary to the preferred direction.

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Attorney Docket No.: SPLX P0004